

APPENDIX

Figure legends

Figure 5:

Adhesion of human mesenchymal stem cells from bone marrow on films of hyaluronic acid ester (HA); gelatine/hyaluronic acid ester composite and gelatine in 2 –D –culture. Cells were harvested and counted after 24 hours in culture.

Left diagram: film without sterilization, Right diagram: films sterilized with gamma irradiation

Figure 6: Proliferation of human mesenchymal stem cells from bone marrow in 2 –D –culture on films composed and sterilized as in figure 5,. Cells were harvested and counted after 24 hours in culture.

figure 7: Double pore structure of composite matrix in comparison to the matrix manufactured after Valentini et al. Higher magnifications show a microporosity in the Valentini - Matrix. Applicant's manufacturing process yields uniform pore walls without microporosity.

Fig 7 A 100x Magnification

Method according to the patent application:

Besides the main pores smaller (but sufficient large for cell seeding) interconnective secondary pores can be detected.

Method after Valentini:

Pore walls voluminous, prevailing filled pore interstices

Complementary copy of the picture is attached with red marked filled pore interstices.

Fig 7 B 500x Magnification

Method according to the patent application:

Pore interstices empty and interconnective (secondary pores), pore walls thin.

Method after Valentini:

Pore interstices filled, missing secondary pores, pore walls thick.

Fig 7 C 3000x Magnification

Ultrastructure of the pore walls in profile. Cross section of a pore wall.

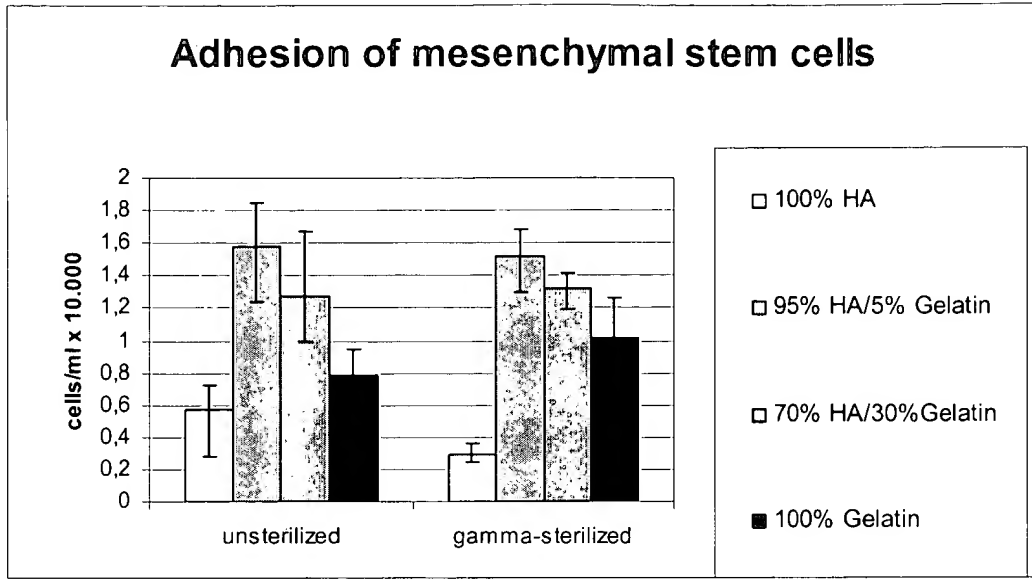


figure 5

Proliferation of mesenchymal stem cells

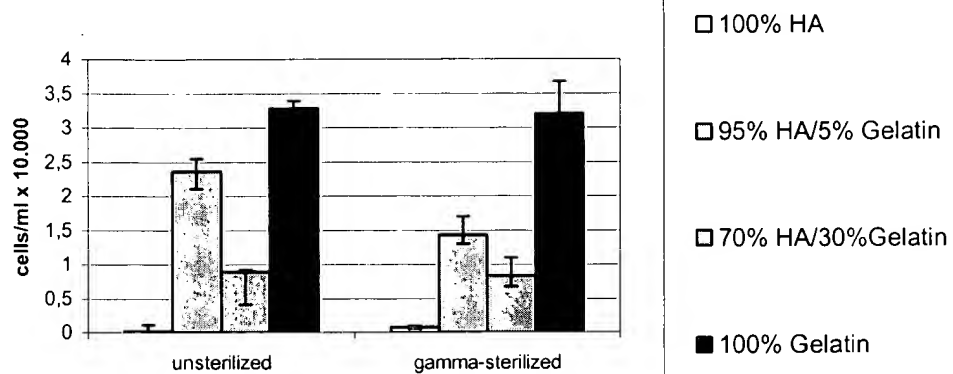


figure 6